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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/141,443      08/27/98      WALEH      A      D-95013A

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IM22/1119

EXAMINER

MARKOFF, A

ART UNIT

PAPER NUMBER

1746

DATE MAILED:

11/19/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/141,443

Applicant(s)

WALEH ET AL.

Examiner

Alexander Markoff

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 August 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: \_\_\_\_\_.

Art Unit: 1746

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to all claims:

The claims are indefinite because claim 1 requires conducting step (b) for "a determinate period of time", but provides no explanation how this period of time should be determined.

As to claims 6 and 7:

These claims are indefinite because claims 6 utilize the same letters (a-d) as claim 1 to designate different processing steps.

Moreover, it is not clear whether or not the steps of "subjecting the organic coating ... to a precursor chemical or physical treatment" (claim 1) and "treating said substrate to said precursor chemical or physical treatment" (claim 6) are the same.

The claims are further indefinite because the term "an appropriate time" (claim 6) is relative in nature lacking proper comparative basis. It is also not clear whether or not this "an appropriate time" and "a determinate period of time" recited by claim 1 are the same.

Art Unit: 1746

As to claims 8-10

These claims are indefinite because claim 8, as written, requires the recited "treatment" to consist of exposure to chemically active process gasses, chemically inert process gases and solvents together. This is because the Markush group consists from only one member (exposure). However, in view of the specification, it is reasonably believed that the claim should be interpreted as requiring the treatment to consist of exposure to a compound selected from the group consisting of chemically active process gases, chemically inert process gases and solvents.

For the examination purposes the claims were interpreted in view of the specification. Clarification and corrections are requested.

As to claim 9:

✓ It is not clear what is referenced as "said process gases". Are "chemically active process gases" or "inert process gases" meant?

As to claim 14:

✓ This claim is indefinite because the term "suitable" is relative in nature lacking proper comparative basis. It is also not clear whether the "electromagnetic radiation" must include UV radiation or the recitation of UV radiation is a narrow limitation following a broad limitation reciting electromagnetic radiation. Since the later is not proper, the claim has been interpreted as requiring the electromagnetic radiation to include UV radiation.

Clarification and corrections are requested.

Art Unit: 1746

As to claims 15-19:

These claims are indefinite because of the deficiencies of claims 15 and 18, which are similar to the deficiencies indicated above with respect to claim 8.

As to claim 18:

This claim is indefinite because of the same deficiencies that were indicated for claim 14.

As to claims 20-22:

These claims are indefinite because it is not clear how "chemical or physical treatment" can be selected from gases, vapors, solvents, etc.

As to claims 16 and 21:

This claim is indefinite because of the same deficiencies as indicated for claim 9.

As to claim 22:

It is not clear how the step of subjecting a substrate to "a vapor consisting essentially of water-free gaseous sulfur trioxide" can be conducted simultaneously with subjecting the substrate to vaporized water.

It is also noted that the language "consisting essentially of" used by claim 1 is not consistent with the requirement of claim 22 regarding chemically active process gases and vapors and vaporized solvents.

As to claim 24:

Art Unit: 1746

This claim is indefinite because it is not clear what is referenced as "certain organo-metallic complexes". It is absolutely not clear which complexes are referenced by the term "certain".

As to claims 26-29:

These claims are indefinite because of the deficiencies of claims 26 and 29, which are similar to the deficiencies indicated above with respect to claim 8.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Settineri et al (US Patent No 4,363,673).

Settineri et al teach (see entire document) a method for removing organic compounds from substrates, including metal and ceramic (glass) substrates.

The method comprises subjecting the substrates to a vapor of water-free sulfur trioxide alone or in mixture with other gases such as nitrogen.

The subjecting step is conducted at claimed temperatures. The contact times disclosed by the reference are inside of the claimed region.

Art Unit: 1746

The subjecting step is conducted after a pretreatment such as heating and/or flushing with gases such as nitrogen.

The sulfur trioxide treatment is followed by a step of subjecting substrates to a gas stream (nitrogen) to remove sulfur trioxide. At some embodiments this step is conducted at the same temperature elevated temperatures as the sulfur trioxide treatment.

After removing sulfur trioxide the substrates are subjected to one or more rinsing steps. The rinsing agents disclosed by the reference are the same as claimed.

The substrates are subjected to kinetic energy (stirring) during the rinsing.

The rinsed substrates are subjected to a drying process, such as nitrogen drying.

It is also noted that the use of kinetic energy in post rinse treatment is inherently disclosed by the disclosure of nitrogen drying, because nitrogen streams used for drying would apply kinetic energy to substrates.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Levenson et al (5,763,016); Kato et al (5,952,157); Settineri et (4,455,175 and 4,536,222) are cited to show the state of the prior art with respect to cleaning method utilizing sulfur trioxide.

Art Unit: 1746

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 703-308-7545. The examiner can normally be reached on Monday - Friday 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on 703-308-4333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Alexander Markoff  
Art Unit 1746

am  
November 18, 1999